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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,173	10/06/2006	Hiroyuki Ochiai	283229US2X PCT	1447
22850 7590 07/16/2010 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER HORNING, JOEL G	
			ART UNIT 1712	PAPER NUMBER
			NOTIFICATION DATE 07/16/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	<p>Application No. 10/560,173</p>	<p>Applicant(s) OCHIAI ET AL.</p>	
	<p>Examiner JOEL G. HORNING</p>	<p>Art Unit 1712</p>	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 29 June 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 56-58, 72 and 73.
Claim(s) withdrawn from consideration: 52-55, 59-71 and 74-76.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____.
13. ☐ Other: _____.

/Michael Cleveland/
Supervisory Patent Examiner, Art Unit 1712

/JOEL G HORNING/
Examiner, Art Unit 1712

Continuation of 3. NOTE: The claims are amended to add a new limitation that has not been previously presented in the application, which may distinguish it from the currently applied art. Further search and consideration would be required in order to determine the patentability of these newly amended claims. .

Continuation of 11. does NOT place the application in condition for allowance because:

Applicant's arguments are directed towards the newly amended claim limitations, which have not been entered. The following is a response to applicant's arguments, in view of a generic "electric spark machine" which does not require the tool electrode be spaced from the component by an electrically insulating fluid.

In response to applicant's arguments that Schell does not teach using an electric spark machine, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In response to applicant's argument that Koizumi is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Koizumi et al, like applicant, is directed towards an electric spark deposition process for depositing protective coatings which can include a mixture of ceramics and metal alloy onto a metal substrate. This is in applicant's field of endeavor and highly relevant to applicant's problem of how to deposit such protective coatings.

Applicant further argues that Koizumi does not use an "electric spark machine" to deposit their coatings, but something different. The applicant has not pointed out, nor can the examiner determine, what required features of a generic "electric spark machine" are missing in the electrospark alloying machine of Koizumi. The Koizumi et al machine generates electric sparks between a tool electrode and a substrate in order to transfer material from the tool electrode to the substrate [0038-0041], so it can be reasonably described as an electric spark machine. Applicant cites definitions of different processes to indicate a difference in the structure of the apparatus that is claimed. Moreover, Koizumi et al is not just performing a general surface alloying process (as applicant appears to imply), but an Electrospark Surface Alloying (ESA) process, which requires a machine to produce the electric sparks, while surface alloying might be done without such a machine. For at least these reasons, this argument of applicant's is not convincing.

Finally, applicant argues that there is no motivation to impregnate silica powder into the pores of a plasma sprayed zirconia coating because a person of ordinary skill in the art would expect it to be suitable to fill the pores in zirconia unless a plasma spray process is used. However, in the rejection as applied, the zirconia is applied by plasma spray and Kamo et al specifically teaches that their coating material, which comprises silica powder (as shown by Church) is suitable and desirable in turbine engine plasma sprayed coatings, so there is a motivation to use such a coating and the expectation of success. Furthermore, applicant has provided not evidence that silica powder would have been expected to be unsuitable, instead just arguing that it is so. For at least these reasons this argument is not convincing..